

## ABSTRACT OF THE DISCLOSURE

Described are a novel graphical element known as a spatial patch and a system and method for rendering the spatial patch to create computer graphics. The spatial patch may include appearance data and displacement data for each of a plurality of nodes that together specify the color and geometry for typically a small portion of a surface of an object. The appearance and displacement data may be independent and irregular for each of the nodes in order to represent complexly colored and structured objects. The spatial patch may be processed independently and may have internal topology or structure to facilitate parallel processing. Accordingly, the spatial patch offers many quality and processing advantages over polygon mesh representations that have previously been used to create three-dimensional computer graphics.